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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,427

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EXAMINER

CULBERT, ROBERTS P

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

08/18/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/568,427	<b>Applicant(s)</b> TSUJI ET AL.	
	<b>Examiner</b> Roberts Culbert	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims as amended have been considered but are moot in view of the new ground(s) of rejection. The limitations of axial opposite ends defining at least two openings and alternately sealed with a sealing material is well known in the filter art. (See, Higuchi et al.)

Regarding new Claim 4, applicant has argued that the art of record fails to teach the recited claim limitations. However, Watanabe teaches using a second pressure as broadly recited since the pressure providing process may be performed repeatedly (1-3 times).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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**Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants admitted prior art (APA) in view of U.S. Patent 5,182,140 to Watanabe et al. and in further view of U.S. Patent 4,293,357 to Higuchi et al.**

Regarding Claims 1 and 4, applicant teaches (Background Paragraphs 2-8) that the prior art teaches a process for producing a filter catalyst, the process comprising a step of preparing a coating slurry in which an inorganic oxide (alumina) powder is dispersed, and coating the coating slurry onto a catalyst-support substrate composed of a porous material having a plurality of cells extending in the axial direction a step of removing the coating slurry in excess from the catalyst-support substrate with the coating slurry coated and a step of drying-calcining the coating slurry. Applicant teaches the invention differs from the prior art in that the removing of the coating slurry in excess is carried out by performing the following steps repeatedly:

a step of holding one of the axial opposite ends of the catalyst-support substrate and another axial opposite end thereof in such a state that a pressure difference is given there between; and a step of holding the one of the opposite ends of the catalyst-support substrate and the other opposite end thereof in an identical pressure state.

However, Watanabe teaches removing of a coating slurry in excess from a support is carried out by performing the following steps repeatedly: a step of holding one of the axial opposite ends of the catalyst-support substrate and another axial opposite end thereof in such a state that a pressure difference is given there between; and a step of holding the one of the opposite ends of the catalyst-support substrate and the other opposite end thereof in an identical pressure state. (*See esp. Col. 12, Line 62 – Col. 13, Line 5 and Figures 5 and 6*).

It would have been obvious to one of ordinary skill in the art at the time of invention to perform the steps as broadly recited in order to remove the coating in the well known manner as recited by Watanabe et al.

Regarding Claim 4, Watanabe teaches using a second pressure as broadly recited since the pressure providing process may be performed repeatedly (1-3 times).

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Regarding the Claim 1 limitations that the axial opposite ends have at least two openings alternately sealed, Higuchi et al. teaches the limitations are well known in the catalyst filter art. (See Fig 3-5; Col. 1, Line 64 – Col. 2, Line 9 and Col. 3, Line 1-Col. 5, Line 26) It would have been obvious to one of ordinary skill in the art at the time of invention to provide alternately sealed openings as shown by Higuchi et al. in order to provide a compact and thin filter having low pressure loss and high available area as recited by Higuchi.

Regarding Claim 2, Watanabe teaches the pressure of 1kPa or more. (0.2-1.0kg/cm<sup>2</sup>)

**Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicants admitted prior art ((APA) in view of U.S. Patent 5,182,140 to Watanabe et al. and U.S. Patent 4,293,357 to Higuchi et al. as applied above to Claims 1, 2 and 4 and in further view of JP 2002-204958 to Nakamura et al.**

Regarding Claim 3, the Admitted Prior Art (APA) in view of Watanabe et al. does not expressly teach oxide powder particle diameter 70% value of 1 micron or less. However, slurries having particle sizes within the nano-scale to micro-scale range are well known in the art. For example, Nakamura et al. teaches adjusting particle size for exhaust type catalyst slurry in the range 0.1-5 microns. (See *attached abstract*) It would have been obvious to one of ordinary skill in the art at the time of invention to provide a suitable slurry particle diameter distribution for exhaust type slurry to be deposited on a support.

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action

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is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberts Culbert whose telephone number is (571) 272-1433. The examiner can normally be reached on Monday-Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Roberts Culbert/  
Primary Examiner, Art Unit 1792